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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER
HILLERY, NATHAN

ART UNIT	PAPER NUMBER
2176	

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/609,314	BRID, REGIS L.F.
	Examiner	Art Unit	
	Nathan Hillery	2176	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days; a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _27 June 2003_.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-40_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2,5-15 and 18-40_ is/are rejected.

7)☐ Claim(s) _3,4,16 and 17_ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _27 June 2003_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _6/27/03_.

4)☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This action is responsive to communications: Application filed on 6/27/03.

2.   Claims 1 – 40 are pending in the case. Claims 1, 14, 27, 32, and 38 are

independent.

Double Patenting

3.   Applicant is advised that should claims 1 – 13 be found allowable, claims 14 – 37

will be objected to under 37 CFR 1.75 as being substantial duplicates thereof. When

two claims in an application are duplicates or else are so close in content that they both

cover the same thing, despite a slight difference in wording, it is proper after allowing

one claim to object to the other as being a substantial duplicate of the allowed claim.

See MPEP § 706.03(k).

Claim Objections

4.   Claims 3, 4, 7, 8, 9, 16, 17, 20, 21, 22, 30, 35 and 36 are objected to under 37

CFR 1.75(c), as being of improper dependent form for failing to further limit the subject

matter of a previous claim. Applicant is required to cancel the claim(s), or amend the

claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in

independent form. Claims 2 and 5 are Markush claims; therefore, it is only necessary to

follow one path as set forth in those claims. The path limited by claims 3, 4 and 7 may

or may not be followed; thus, claims 3, 4 and 7 do not fully further limit the claim(s) from

which they depend. Consequently, the Office will take no further action on the merits

with respect to claims 3, 4 and 7 at this time. Claims 8, 9, 16, 17, 20, 21, 22, 30, 35 and

36 are considered substantially similar as claims 3, 4 and 7 as outlined in the rejection

under 35 USC 112, second paragraph.

Claim Rejections - 35 USC § 112

5.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter which the applicant regards as his invention.

6.   Claims 5 – 9, 12, 13, 18 – 22, 25, 26, 29, 30, and 34 – 36 are rejected under 35

U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and

distinctly claim the subject matter which applicant regards as the invention.

7.   Claim 5 recites the limitation "the column characteristic object" in line 6. There is

insufficient antecedent basis for this limitation in the claim. Consequently, all

subsequent recitations of "the column characteristic object" are also rejected.

8.   Claim 8 recites the limitation "the row styles" in line 1. There is insufficient

antecedent basis for this limitation in the claim. Consequently, all subsequent recitations

of "the row styles" are also rejected.

9.   Claim 9 recites the limitation "the row states" in line 1. There is insufficient

antecedent basis for this limitation in the claim. Consequently, all subsequent recitations

of "the row states" are also rejected.

10.   **Regarding claims 6, 7, 12 and 13**, the claims are rejected for fully incorporating

the deficiencies of the base claim(s) from which they depend.

11.   **Regarding claims 5 – 9, 12 and 13**, claim 5 will be rejected using the broadest

most reasonable interpretation that can be ascertained by the Office at this time.

Furthermore, claims 6 – 9 will be interpreted as being substantially similar to claims 2 –

4 and claims 12 and 13 as being substantially similar to claims 10 and 11; thus, the

claims will be treated in the same way as their substantial equivalent for purposes of

this examination. Consequently, see the objection(s) of claims 3 and 4 under Claim

Objections above.

Claim Rejections - 35 USC § 103

12.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

13.   Claims 1 – 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Knowlton (US 6157389 A) in further view of Sekiguchi et al. (US 20010004739 A1).

14.   **Regarding independent claim 1**, Knowlton teaches that *A visual image may be*

represented as an array of r rows by c columns of pixels (picture elements). A known

method for compressing such image representative data to reduce the size of the image

is decimation of the image representative data, i.e. the removal from the image array of

regularly spaced rows and/or columns of pixels. For example, to reduce the size of an

image by 50% horizontally and vertically, every other row of pixels is deleted, and every

other pixel in the remaining rows is also deleted. Decimation is simple and fast.

However, because the image structure is disregarded, details and legibility of the

resulting compressed image are degraded. The inventor has realized that often images

contain areas from which image information could be omitted without degrading the

detail or legibility of the image. For example, large swaths (either adjacent rows or

adjacent columns) of a solid color (e.g. white or black) represent such image

information. Such areas will be called blank areas in the remainder of this application

(Column 1, lines 17 – 28), compare with **creating a first row object that comprises**

one or more first cell objects, the first row object for use in organizing the one or

more first cell objects and data associated with the one or more first cell objects

for presentation within the grid control; creating a second row object that

comprises one or more second cell objects, the second row object for use in

organizing the one or more second cell objects and data associated with the one

or more second cell objects for presentation within the grid control. Knowlton

does not explicitly teach **creating a row characteristic object for use in determining**

how the data associated with the one or more first and second cell objects should

be presented within the grid control and **creating an index to link the row**

characteristic object to the first and second row objects such that the row

characteristic object is shared between the first and second row objects.

However, Sekiguchi et al. teach that *In an image retrieval system according to the*

present invention, each piece of input picture data received in the characteristic

descriptor producing unit denotes compressed video data which composes one or more

intra-frames and one or more inter-frames, both an average value and a standard

deviation are produced as one characteristic descriptor of the intra-frames of the video

segment in the characteristic descriptor producing unit by extracting an average matrix

of pixel values in a prescribed coding area of one intra-frame for each intra-frame of the

video segment, calculating a sum of the average matrices of all intra-frames included in

the video segment and calculating both the average value of the average matrices and

the standard deviation of the average matrices from the sum and the number of intra-

frames in the video segment, and one characteristic descriptor of the inter-frames of the

video segment is produced in the characteristic descriptor producing unit by extracting a

matrix of motion vectors of pixels of the prescribed coding areas of one inter-frame for

each inter-frame of the video segment, calculating an average of the motion vectors of

each inter-frame of the video segment as a motion vector average, classifying zero run

lengths, which are obtained according to a threshold processing for the motion vectors

of one inter-frame, into a plurality of classified types of zero run lengths for each inter-

frame of the video segment, calculating an average of the motion vector averages and a

plurality of classified types of average zero run lengths in the video segment according

to the number of inter-frames in the video segment and setting the average of the

motion vector averages and the classified types of average zero run lengths as the

characteristic descriptor of the inter-frames of the video segment (block 0020), compare

with **creating a row characteristic object for use in determining how the data**

associated with the one or more first and second cell objects should be

presented within the grid control. Sekiguchi et al. teach that *In the reproduction*

control unit 220, reproduced contents specifying information 221, in which contents

specifying information indicating the specifying of contents is included, is produced from

the reproduction request information 219. In this case, it is preferred that the

reproduced contents specifying information 221 including the contents specifying

information be described in the for-retrieval description data file 210 in advance as link

information indicating the linking to contents, the contents specifying information be

added to retrieval result information 217 when the retrieval result information 217 is

presented to the user 232, the contents specifying information-be sent to the client, and

the contents specifying information be used as the reproduction request information 219

(block 0302), compare with **creating an index to link the row characteristic object to**

the first and second row objects such that the row characteristic object is shared

between the first and second row objects. It would have been obvious to one of

ordinary skill in the art at the time of the invention to combine the invention of Knowlton

with that of Sekiguchi et al. because such a combination would provide the users of

Knowlton with *an image retrieval system and an image retrieval method in which an*

image retrieval processing can be efficiently performed (block 0009).

15.   **Regarding dependent claims 2 and 6**, Knowlton does not explicitly teach **the**

row characteristic object comprises presentation information for use in

presenting the data associated with the one or more first and second cell objects,

and wherein the presentation information is one or more of a row height, row

styles or row states. However, Sekiguchi et al. teach that *In an image retrieval system*

according to the present invention, each piece of input picture data received in the

characteristic descriptor producing unit denotes compressed video data which

composes one or more intra-frames and one or more inter-frames, both an average

value and a standard deviation are produced as one characteristic descriptor of the

intra-frames of the video segment in the characteristic descriptor producing unit by

extracting an average matrix of pixel values in a prescribed coding area of one intra-

frame for each intra-frame of the video segment, calculating a sum of the average

matrices of all intra-frames included in the video segment and calculating both the

average value of the average matrices and the standard deviation of the average

matrices from the sum and the number of intra-frames in the video segment, and one

characteristic descriptor of the inter-frames of the video segment is produced in the

characteristic descriptor producing unit by extracting a matrix of motion vectors of pixels

of the prescribed coding areas of one inter-frame for each inter-frame of the video

segment, calculating an average of the motion vectors of each inter-frame of the video

segment as a motion vector average, classifying zero run lengths, which are obtained

according to a threshold processing for the motion vectors of one inter-frame, into a

plurality of classified types of zero run lengths for each inter-frame of the video

segment, calculating an average of the motion vector averages and a plurality of

classified types of average zero run lengths in the video segment according to the

number of inter-frames in the video segment and setting the average of the motion

vector averages and the classified types of average zero run lengths as the

characteristic descriptor of the inter-frames of the video segment (block 0020), compare

with **the row characteristic object comprises presentation information for use in**

presenting the data associated with the one or more first and second cell objects,

and wherein the presentation information is one or more of a row height, row

styles or row states.

16.   **Regarding dependent claim 5**, Knowlton teaches that *A visual image may be*

represented as an array of r rows by c columns of pixels (picture elements). A known

method for compressing such image representative data to reduce the size of the image

is decimation of the image representative data, i.e. the removal from the image array of

regularly spaced rows and/or columns of pixels. For example, to reduce the size of an

image by 50% horizontally and vertically, every other row of pixels is deleted, and every

other pixel in the remaining rows is also deleted. Decimation is simple and fast.

However, because the image structure is disregarded, details and legibility of the

resulting compressed image are degraded. The inventor has realized that often images

contain areas from which image information could be omitted without degrading the

detail or legibility of the image. For example, large swaths (either adjacent rows or

adjacent columns) of a solid color (e.g. white or black) represent such image

information. Such areas will be called blank areas in the remainder of this application

(Column 1, lines 17 – 28), compare with **creating one or more column objects
associated with the one or more first and second cell objects, wherein a cell
characteristic for each of the one or more first and second cell objects for use in
presenting the data associated with the one or more first and second cell objects
can be determined by either the row characteristic object or the column
characteristic object.**

17.   **Regarding dependent claims 10 and 12,** Knowlton does not explicitly teach
**creating a states list that comprises first and second states for the first and
second row objects, respectively.** However, Sekiguchi et al. teach that *In cases*

where the use order of the types of characteristic descriptors in the retrieval is changed,

the retrieval result is changed. In this example, because a plurality of video segments

well conforming to the user's retrieval request from a viewpoint of the magnitude of

motion are selected when the data base is set to an initial state, it is expected that the

retrieval result finally presented to the user is reliably most similar to the retrieval

request from a viewpoint of the magnitude of motion (Block 0200), compare with

creating a states list that comprises first and second states for the first and

second row objects, respectively. It would have been obvious to one of ordinary skill

in the art at the time of the invention to combine the invention of Knowlton with that of

Sekiguchi et al. because such a combination would provide the users of Knowlton with

an image retrieval system and an image retrieval method in which an image retrieval

processing can be efficiently performed (block 0009).

18.   **Regarding dependent claims 11 and 13,** Knowlton does not explicitly teach **the**

first and second row states include one or more of a read-only, selected,

resizable, frozen, enabled or visible, and wherein these states can be either

turned on or off. However, Sekiguchi et al. teach that *The image retrieval method*

according to the present invention further comprises the steps of preparing pieces of

video data as the pieces of input image data, presenting a piece of key image data,

which represents each of pieces of video data specified in the retrieval, to the user as

the retrieval result, receiving a reproduction request indicating a specific key image

which is selected by the user from a plurality of key images indicated by the pieces of

key image data, reading out a piece of specific video data represented by the specific

key image, and decoding and reproducing the piece of specific video data (block 0052),

compare with **the first and second row states include one or more of a read-only,**

selected, resizable, frozen, enabled or visible, and wherein these states can be either turned on or off. It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the invention of Knowlton with that of Sekiguchi et al. because such a combination would provide the users of Knowlton with *an image retrieval system and an image retrieval method in which an image retrieval processing can be efficiently performed* (block 0009).

19.   **Regarding claims 14 – 40**, the claims incorporate substantially similar subject matter as claims 1 – 13 and are rejected along the same rationale.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nathan Hillery whose telephone number is (571) 272-4091. The examiner can normally be reached on M - F, 10:30 a.m. - 7:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Heather R. Herndon can be reached on (571) 272-4136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

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you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

NH

WILLIAM BASHORE
PRIMARY EXAMINER
11/27/2005